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**SPECIAL-PURPOSE AIRCRAFT AT  
SOVIET AVIATION AIRFIELDS  
IN THE USSR, EAST EUROPE,  
AND MONGOLIA (S)**

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## **SPECIAL-PURPOSE AIRCRAFT AT SOVIET AVIATION AIRFIELDS IN THE USSR, EAST EUROPE, AND MONGOLIA (S)**

### **ABSTRACT**

1. (TSR) This report provides an imagery-derived analysis of special-purpose CAT (AN-10) and CURL (AN-26) aircraft and special-purpose HOOK (MI-6) and HIP C (MI-8) helicopters identified on KEYHOLE imagery at 35 Soviet aviation airfields. These airfields are in the USSR,  Czechoslovakia, Poland, Hungary, and Mongolia. It is postulated in this report that these aircraft are used as airborne command posts/radio-relay platforms.

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2. (U) This report contains a location map, a table, and four annotated photographs.

### **BASIC DESCRIPTION**

3. (TSR) Figure 1 shows the locations of the 35 Soviet aviation airfields in the USSR, East Europe, and Mongolia where special-purpose aircraft have been identified. Table 1 lists the airfields by military district or country and shows the type of special-purpose aircraft deployed at each.

4. (TSR) The special-purpose CAT aircraft was identified on KEYHOLE imagery at six Soviet aviation airfields in the USSR (Table 1). The special-purpose CAT differs from the standard CAT by the addition of the following items of equipment visible on satellite imagery: at least one very-high-frequency (VHF) blade antenna dorsally mounted on the fuselage forward of the wing, two VHF blade antennas dorsally mounted on the fuselage aft of the wing, and one dorsally mounted wire antenna on the starboard side of the fuselage aft of the wing (Figure 2).

5. (TSR) The special-purpose CURL aircraft was identified on KEYHOLE imagery at 19 Soviet aviation airfields in the USSR, Hungary, and Poland (Table 1). The special-purpose CURL differs from the standard CURL by the addition of the following items of equipment visible on satellite imagery: two offset VHF blade antennas dorsally mounted on the fuselage forward of the wing, two offset VHF blade antennas dorsally mounted on the fuselage aft of the wing, and one unidentified antenna/patch mounted on the tip of the vertical stabilizer (Figure 3).

6. (TSR) The special-purpose HOOK helicopter was identified on KEYHOLE imagery at 22 Soviet aviation airfields in the USSR,  Hungary, Czechoslovakia, and Mongolia (Table 1). The special-purpose HOOK differs from the standard HOOK by the addition of the following items of equipment visible on satellite imagery: two unidentified pods mounted on the lower starboard side of the fuselage and four VHF blade antennas in an X-shaped pattern (two dorsally mounted and two ventrally mounted) on the tail boom just forward of the horizontal stabilizer (Figure 4).

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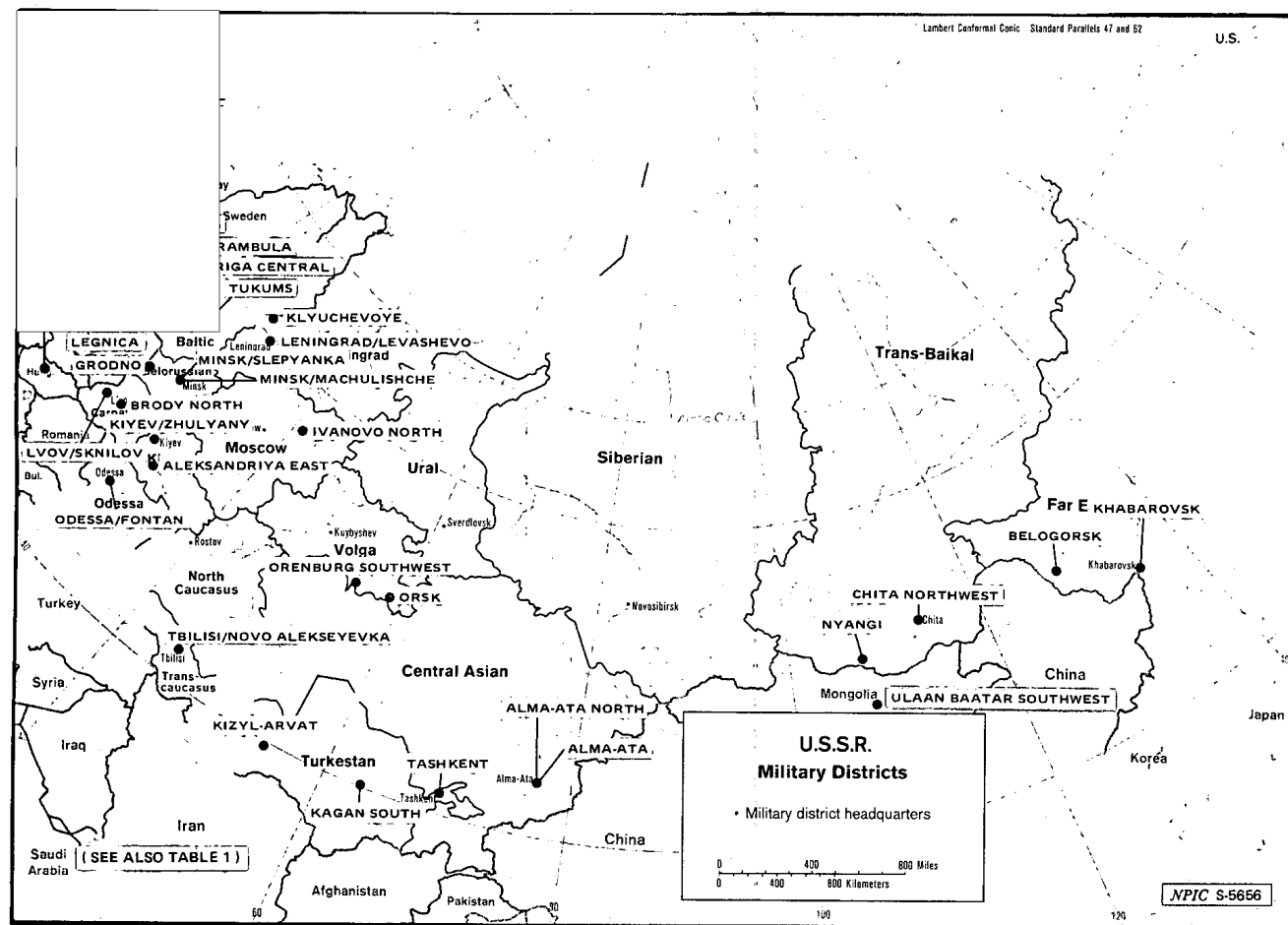


FIGURE 1. LOCATIONS OF SOVIET AVIATION AIRFIELDS HOUSING SPECIAL-PURPOSE AIRCRAFT

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*Table 1. Airfields in the USSR, East Europe, and Mongolia  
Which House Special-Purpose Aircraft, Arranged by Military Association*

*This table in its entirety is classified TOP SECRET RUFF UMBRA*

Military District Or Country	Airfield Name	BE	Tac Air Army <sup>1</sup>	Types of Special-Purpose Aircraft Deployed			
				CURL	HOOK	CAT	HIP C
Baltic	Riga Central		15th	Yes	No	No	No
	Riga/Rambula		15th	Yes	No	No	No
	Tukums		15th	Yes*	No	No	No
Belorussian	Grodno		26th	No	Yes	No	No
	Minsk/Machulishche		26th	Yes	No	Yes	No
	Minsk/Stepyanka		26th	No	Yes	No	No
Carpathian	Brody North		14th	No	Yes	No	No
	Lvov/Sknilov		14th	No	Yes	Yes**	No
Central Asian	Alma-Ata		73d	Yes	No	Yes	No
	Alma-Ata North		73d	Yes	Yes	No	Yes
Far East	Belogorsk		1st	No	Yes	No	Yes
	Khabarovsk		1st	Yes	Yes	Yes	No
Kiyev	Aleksandriya East		17th	No	Yes	No	No
	Kiyev/Zhulyany		17th	Yes	No	No	No
Leningrad	Klyuchevoye		76th	No	Yes	No	No
	Leningrad/Levashevo		76th	Yes	No	No	No
Moscow	Ivanovo North		MDAV***	Yes*	No	No	No
Odessa	Odessa/Fontan		5th	Yes	Yes	Yes**	No
Transbaikal	Chita Northwest		23d	Yes	Yes	Yes	No
	Nyangi		23d	Yes*	No	No	No
Transbaikal (Mongolia)	Ulaan Baatar Southwest		23d	No	Yes	No	No
Transcaucasus	Tbilisi/Novo Alekseyevka		34th	Yes	Yes	No	No
Turkestan	Kagan South		6th	No	Yes	No	No
	Kizyl-Arvat		6th	No	Yes*	No	No
	Tashkent		6th	No	Yes	No	No
Volga	Orenburg Southwest		MDAV***	Yes	No	No	No
	Orsk		MDAV***	Yes	No	No	No
Czechoslovakia	Milovice		SAF***	No	Yes	No	No
Poland	Legnica		4th	Yes	No	No	No
	Osla		4th	Yes*	No	No	No
Hungary	Budapest/Tokol		36th	Yes	Yes	No	No

\*Not usually seen here; not headquarters

\*\* Poss

\*\*\*MDAV-- Military District Aviation; SAF--Soviet Air Force.

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7. (TSR) The special-purpose HIP C helicopter was identified on KEYHOLE imagery at two Soviet aviation airfields in the USSR (Table 1). The special-purpose HIP C differs from the standard HIP C by the addition of the following items of equipment visible on satellite imagery: a CLOTHES HORSE antenna dorsally mounted on the tail boom just aft of the fuselage, a ventrally mounted V-shaped antenna/antenna mount just forward of the horizontal stabilizer, and two unidentified boxes, one mounted on each side of the fuselage where the rocket pods are often mounted (Figure 5).

8. (TSU) The deployment of these special-purpose aircraft at Military District Headquarters and/or Tactical Air Army Headquarters (exceptions are noted in Table 1) suggests that these aircraft will serve as airborne command posts/radio-relay platforms in support of Military District Headquarters, Tactical Air Armies, and Tactical Air Signal Regiments in the event of hostilities. If these aircraft are used as airborne command posts/radio-relay platforms, it would upgrade the Soviet airborne strike capability and reduce the vulnerability of Soviet command communications with forward air controllers serving the ground units.<sup>1</sup>

REFERENCES

IMAGERY

(TSR) KEYHOLE imagery acquired from [redacted]  
[redacted] was used in the preparation of this report.

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DOCUMENT

[redacted]

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REQUIREMENT

Project 130011NE

(S) Comments and queries regarding this report are welcome. They may be directed to [redacted]  
[redacted] Warsaw Pact Forces Division, Imagery Exploitation Group,  
[redacted]

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## List of Conversion Factors by Classification

### UNITS OF LENGTH

IF YOU HAVE	MULTIPLY BY	TO OBTAIN
MILLIMETERS	0.0394	INCHES
CENTIMETERS	0.3937	INCHES
INCHES	25.4000	MILLIMETERS
INCHES	2.5400	CENTIMETERS
FEET	0.3048	METERS
FEET	0.0003	KILOMETERS
YARDS	0.9144	METERS
METERS	3.2808	FEET
METERS	0.0005	MILES(NAUTICAL)
METERS	1.0936	YARDS
KILOMETERS	3280.8400	FEET
KILOMETERS	0.6214	MILES(STATUTE)
KILOMETERS	0.5400	MILES(NAUTICAL)
MILES(STATUTE)	1.6093	KILOMETERS
MILES(NAUTICAL)	6076.1154	FEET
MILES(NAUTICAL)	1.8520	KILOMETERS
MILES(NAUTICAL)	1852.0000	METERS

### UNITS OF MASS

IF YOU HAVE	MULTIPLY BY	TO OBTAIN
KILOGRAMS	2.2046	POUNDS(AVOIR.)
POUNDS(AVOIR.)	0.4536	KILOGRAMS
SHORT TONS	0.9072	METRIC TONS
METRIC TONS	1.1023	SHORT TONS
METRIC TONS	0.9842	LONG TONS
LONG TONS	1.0160	METRIC TONS

### UNITS OF VOLUME

IF YOU HAVE	MULTIPLY BY	TO OBTAIN
LITERS	0.2642	GALLONS
LITERS	0.0063	BARRELS(POL)
LITERS	0.0010	CUBIC METERS
GALLONS	3.7854	LITERS
GALLONS	0.1337	CUBIC FEET
GALLONS	0.0238	BARRELS(POL)
GALLONS	0.0038	CUBIC METERS
BUSHELS	0.0352	CUBIC METERS
CUBIC FEET	7.4805	GALLONS
CUBIC FEET	0.1781	BARRELS(POL)
CUBIC FEET	0.0283	CUBIC METERS
CUBIC YARDS	0.7646	CUBIC METERS
BARRELS(POL)	158.9873	LITERS
BARRELS(POL)	42.0000	GALLONS
BARRELS(POL)	5.6146	CUBIC FEET
BARRELS(POL)	0.1590	CUBIC METERS
CUBIC METERS	1000.0000	LITERS
CUBIC METERS	284.1721	GALLONS
CUBIC METERS	35.3147	CUBIC FEET
CUBIC METERS	28.3776	BUSHELS
CUBIC METERS	6.2898	BARRELS(POL)
CUBIC METERS	1.3080	CUBIC YARDS

### UNITS OF AREA

IF YOU HAVE	MULTIPLY BY	TO OBTAIN
SQUARE CENTIMETERS	0.1550	SQUARE INCHES
SQUARE INCHES	6.4516	SQUARE CENTIMETERS
SQUARE FEET	0.0929	SQUARE METERS
SQUARE YARDS	0.8361	SQUARE METERS
SQUARE METERS	10.7639	SQUARE FEET
SQUARE METERS	1.1960	SQUARE YARDS
SQUARE METERS	1.0000	CENTARES
SQUARE METERS	0.0002	ACRES
SQUARE METERS	0.0001	HECTARES
ACRES	4046.8564	SQUARE METERS
ACRES	0.4047	HECTARES
HECTARES	10000.0000	SQUARE METERS
HECTARES	2.4711	ACRES



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